



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,659	10/14/2003	Ming Fang	10559-860001	5642
20985 7590 05/30/2007 FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER WONG, EDNA	
			ART UNIT 1753	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/685,659

Applicant(s)

FANG ET AL.

Examiner

Edna Wong

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-23,25-32 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-23,25,27-30 and 35 is/are allowed.
- 6) ☒ Claim(s) 26,31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

This is in response to the Amendment dated May 14, 2007. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Response to Arguments

Election/Restrictions

Claims **30-32** are directed to an allowable method. Claims **30-32**, directed to the process previously withdrawn from consideration as a result of a restriction requirement, are hereby rejoined and fully examined for patentability.

Claim Rejections - 35 USC § 112

Claims **22-23 and 25-26** have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 22-23 and 25-26 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 103

I. Claims **21-23 and 29** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Brown et al.** (US Patent No. 6,322,686 B1).

The rejection of claims 21-23 and 29 under 35 U.S.C. 103(a) as being

unpatentable over Brown et al. has been withdrawn in view of Applicants' amendment.

II. Claims **24-26** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Brown et al.** (US Patent No. 6,322,686 B1) as applied to claims 21-23 and 29 above, and further in view of **Kurze et al.** (US Patent No. 4,820,388).

The rejection of claims 24-26 under 35 U.S.C. 103(a) as being unpatentable over Brown et al. as applied to claims 21-23 and 29 above, and further in view of Kurze et al. has been withdrawn in view of Applicants' amendment.

III. Claims **27 and 28** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Brown et al.** (US Patent No. 6,322,686 B1) as applied to claims 21-23 and 29 above, and further in view of **Larson** (US Patent No. 6,982,191 B2).

The rejection of claims 27 and 28 under 35 U.S.C. 103(a) as being unpatentable over Brown et al. as applied to claims 21-23 and 29 above, and further in view of Larson has been withdrawn in view of Applicants' amendment.

Response to Amendment

Claim Rejections - 35 USC § 112

Claims **26, 31 and 32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26

line 4-7, recites "the one or more stannous alkane sulfonates comprises between approximately 20 and 40 grams per liter of one of stannous methane sulfonate, stannous sulfate, and a mixture thereof".

Stannous sulfate is not an stannous alkane sulfonate.

Claim 31

lines 3-4, "the bath including between approximately 10 and 30 ppm benzalacetone" lacks antecedent basis.

lines 3-4, it appears that "between approximately 10 and 30 ppm benzalacetone" is further limiting the "bath including" as recited in claim 30, line 2. However, it is unclear if it is.

Claim 32

lines 3-5, "the bath including between approximately 130 and 170 grams per liter of one of methanesulfonic acid, sulfuric acid, and the mixture thereof" lacks antecedent basis.

lines 3-5, it appears that "between approximately 130 and 170 grams per liter of one of methanesulfonic acid, sulfuric acid, and the mixture thereof" is further limiting the

"bath including" as recited in claim 30, line 2. However, it is unclear if it is.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Claims **21-23, 25-29 and 35** define over the prior art of record because the prior art does not teach or suggest a method comprising electroplating as presently claimed, esp., wherein the solution comprises a polyethyleneglycol alkyl-3-sulfopropyl diether.

Claims **30-32** define over the prior art of record because the prior art does not teach or suggest a method comprising the step of electroplating as presently claimed, esp., wherein the bath includes between approximately 1 and 2 grams per liter of one or more polyethyleneglycol alkyl-3-sulfopropyl diethers.

The prior art does not contain any language that teaches or suggests the above. *Kurze et al.* teaches polyethyleneglycol naphthyl-3-sulfopropyl diether compounds. Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 26, 31 and 32 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Art Unit: 1753

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 1753

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

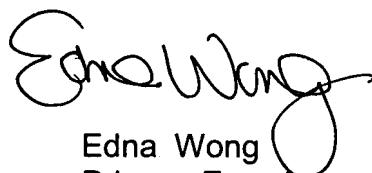
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Edna Wong", with a stylized flourish at the end.

Edna Wong
Primary Examiner
Art Unit 1753

EW
May 27, 2007